银屑病合并心脏损伤 2 例

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摘要：银屑病是一种慢性、复发性、免疫介导的全身炎 症性疾病，可引起皮肤、内脏及关节的损害。银屑病合并心血管疾病是其死亡率较高的主要原因。现报告中国人民解放军总医院确诊银屑病合并心脏损伤 2 例。病例 1 患者诊断为银屑病合并急性脑梗死、扩张性心肌病、银屑病关节炎；其心脏磁共振检查表现为左心室增大，运动功能减低，增强后室间隔及下壁心肌中层延迟强化。病例 2 患者诊断为银屑病合并心肌梗死；其心脏磁共振检查表现为左室侧壁及心尖部心肌变薄，运动功能减低，增强后见左室侧壁及心尖部心内膜心下灌注缺损及延迟强化。

关键词：银屑病；扩张性心肌病；心肌梗死；脑卒中；银屑关节炎

Psoriasis complicated with cardiac damage: Report of Two Cases

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Abstract: Psoriasis is a chronic, recurrent, immune-mediated systemic inflammatory disease that can cause skin, visceral and joint damage. Psoriasis complicated with cardiovascular disease is the main reason for its high mortality. Two cases of psoriasis complicated with cardiac damage were described in this article. For case 1, the patient was diagnosed as psoriasis complicated with acute cerebral infarction, dilated cardiomyopathy, and psoriatic arthritis. Cardiac magnetic resonance (CMR) showed left ventricular enlargement, reduced systolic function, and delayed enhancement in the middle layer of ventricular septum and inferior myocardium of left ventriculum. For case 2, the patient was diagnosed as psoriasis complicated with myocardial infarction. CMR showed that the wall of left ventricular lateral wall and apex was thin and the systolic function was reduced. After contrast administration, the lateral wall of left ventricular and apex demonstrated subendocardial perfusion defect and transmural delayed enhncement.

Key words: Psoriasis;dilated cardiomyopathy;Myocardial infarction; Stroke;Psoriatic arthritis

银屑病（psoriasis）是一种慢性、复发性、免疫介导的全身炎症性疾病，以皮肤局限或广泛分布鳞屑性红斑或斑块为典型临床表现，可引起皮肤、内脏及关节的损害[1]。银屑病可发生于任何年龄，男女患病率相近，约 2/3 的患者在 40 岁以前发病。银屑病可能作为心血管疾病的独立危险因素，尤其是在银屑病年轻患者的心血管疾病风险与其疾病的持续时间

及严重程度相关，病情越重、持续时间越长其心血管风险越高[2]。中国人民解放军总医院第一医学中心于 2023 年收治了 2 例银屑病病史 10 余年合并心脏损伤的年轻患者，现将其病史、影像学及相关实验室查特征报道如下。

1、病例资料

病例 1：患者，男，35 岁，既往有银屑病病史 10 余年。11 年前因“皮疹近 3 年，多关节肿痛半年，加重半个月”首次入院。查体：全身多处脱屑样皮疹。胸椎、腰椎棘突部分有压痛，左腕关节、双髋、双踝关节、左足第一跖趾关节肿胀压痛，活动受限。实验室检查：C-反应蛋白升高（5.08mg/dl↑）、红细胞沉降率升高（78mm/h↑），类风湿因子正常，HLA-B27（蛋白）阳性。行超声检查提示：多关节腔及鞘膜积液、滑膜增生。行骨盆 X 线（图 1）提示双髋关节关节炎。行髋部 MRI（图 2）提示双髋关节骨质增生，滑膜增厚,符合银屑病关节炎表现。临床诊断为银屑病合并银屑病关节炎。2023 年 3 月 9 日患者因“突发不能言语 1 天余”再次入院。实验室检查：C-反应蛋白升高（0.945mg/dl↑），白细胞介素-6 升高（8.6pg/ml↑）；红细胞沉降率升高（31mm/h↑）；HLA-B27（蛋白）阳性；甘油三酯轻度升高（2.02mmol/L↑），高密度脂蛋白胆固醇降低（0.86mmol/L↓）;脑利钠肽前体升高（590.3pg/ml↑）。空腹葡萄糖轻度升高（6.40mmol/L↑），尿糖定性升高（1000.0mg/dl↑）；血糖化血红蛋白正常；葡萄糖耐量 1 小时试验升高（11.77mmol/L↑），葡萄糖耐量 2 小时试验升高（9.19mmol/L↑）。入院后行头颅 MRI 提示右侧 Broca 区梗死（图 3）；心脏磁共振平扫+动态增强检查提示扩张性

心肌病（图 4）。结合临床及相关检查诊断为急性心源性脑梗死、扩张性心肌病、银屑病、糖尿病前期。



图 1 骨盆 X 线提示双侧髋关节炎;图 2A-D 髋关节 MR 提示双髋关骨质增生，滑膜增厚。

Fig 1 Pelvic X-ray reveals hip osteoarthritis; Fig 2A-D hip joint MR reveals hip osteomalacia with synovialhickening.

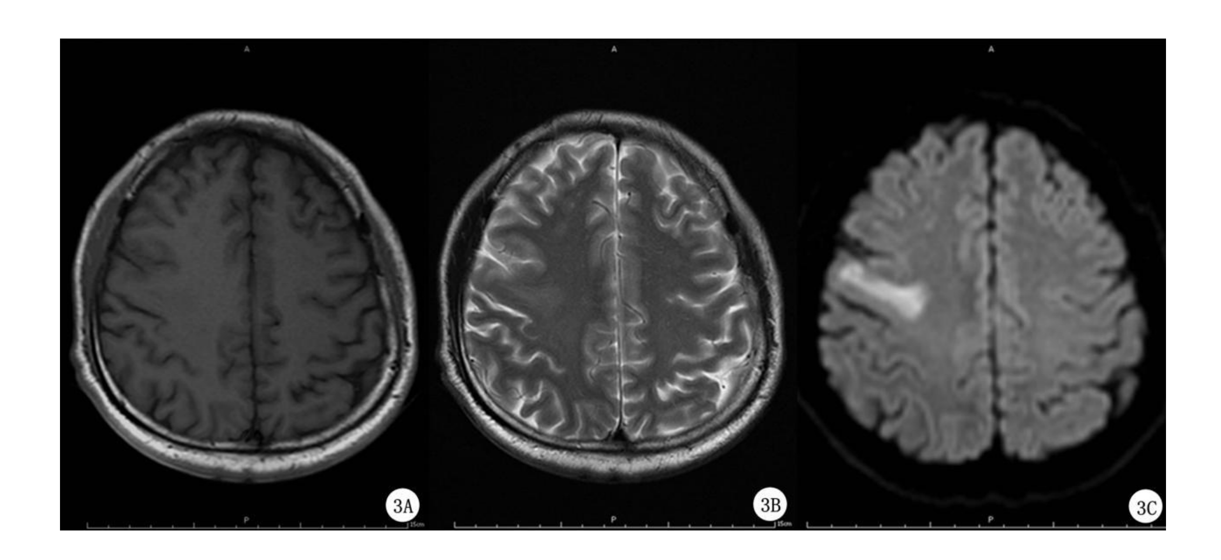


图 3A-C 头颅 MR 平扫示右侧 Broca 区梗死

Fig 3A-C Head MRI reveals right Broca's rea infarction

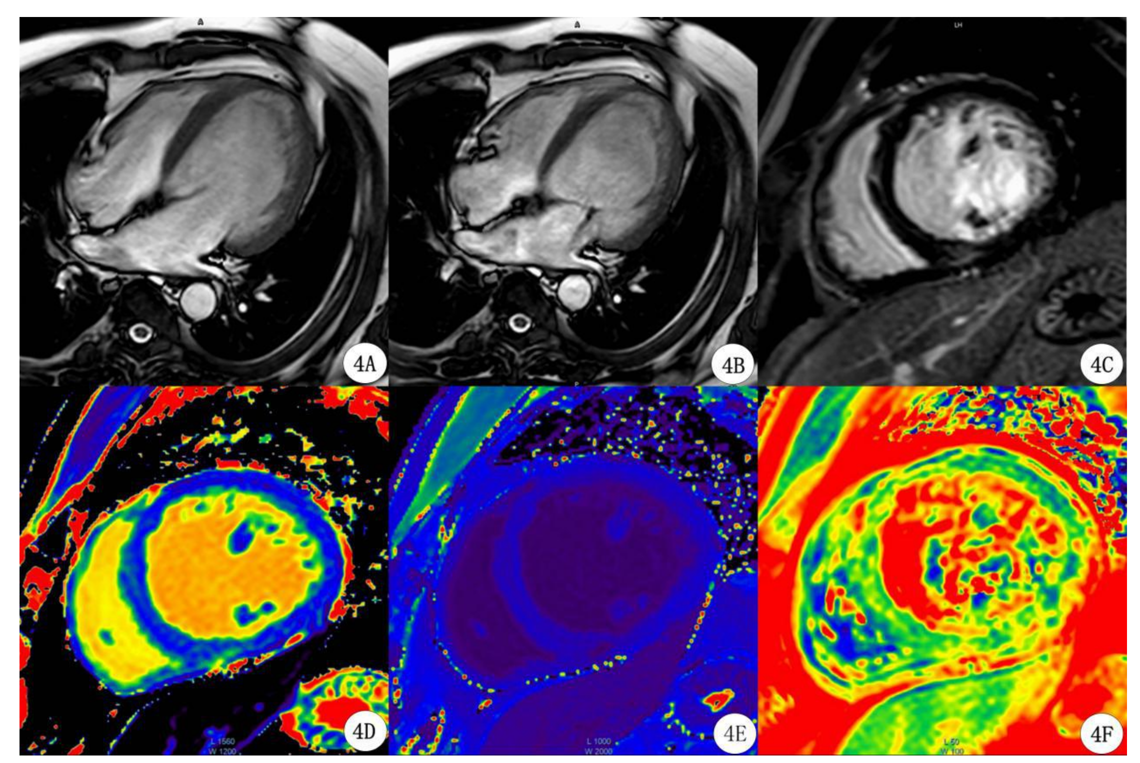


图 4 心脏磁共振平扫+动态增强：图 4A、B 为电影序列舒张期及收缩期示左心室扩大，收缩-舒张运动功能减低，二尖瓣见反流，提示二尖瓣关闭不全；图 4C：LGE 示室间隔及下壁心肌中层延迟强化；图 4D~F 分别为平扫 T1 mapping、增强 T1 mapping 及 T2 mapping。测得初始 T1 值为 1420.51ms,增强后 T1 值为 258.55ms，平扫 T1 血池 1792.11ms，增强 T1 血池 209.13ms,HCT 0.492，计算 ECV 值约 38%；T2 值为 18.58/s；左室血分数(LVEF)为 15%。

Fig 4 Cardiac Magnetic Resonance Scanning + Dynamic Enhancement:Fig 4A、B Diastole and systole in the cine sequence: left ventricular enlargement , systolic-diastolic motion is reduced, and regurgitation is seen in the mitral valve,reveals mitral valve closure insufficiency; Fig 4C LGE reveals delayed enhancement of the interventricular septum and lower wall

myocardial midlayer;Fig4D-F Native T1 mapping、enhanced T1 mapping and T2 mapping.T1 myocardium native 1420.51ms,T1 myocardium enhanced 258.55ms，T1 blood native 1792.11ms，T1 blood enhanced 209.13ms,HCT 0.492，ECV 38%；T2 1.58/s；LVEF 15%.

病例 2：患者，男，33 岁，因间断活动后胸痛 2 年，再发 20 天入院。患者既往有银屑病病史 10 年余，痛风病史 5 年余；有吸烟、饮酒史 15 年。BMI：29.9。实验室检查：血清尿酸升高（635.3umol/L↑），高密度脂蛋白胆固醇降低（0.91mmol/L↓），心肌酶谱、脑利钠肽前体、C-反应蛋白正常;HLA-B27（蛋白）阳性。冠脉 CTA 检查提示冠状动脉未见异常。行心脏磁共振平扫+动态增强检查提示心肌缺血梗死；左室心尖部血栓形成（图 5）。结合临床及相关检查诊断断为银屑病合并心肌梗死、痛风。

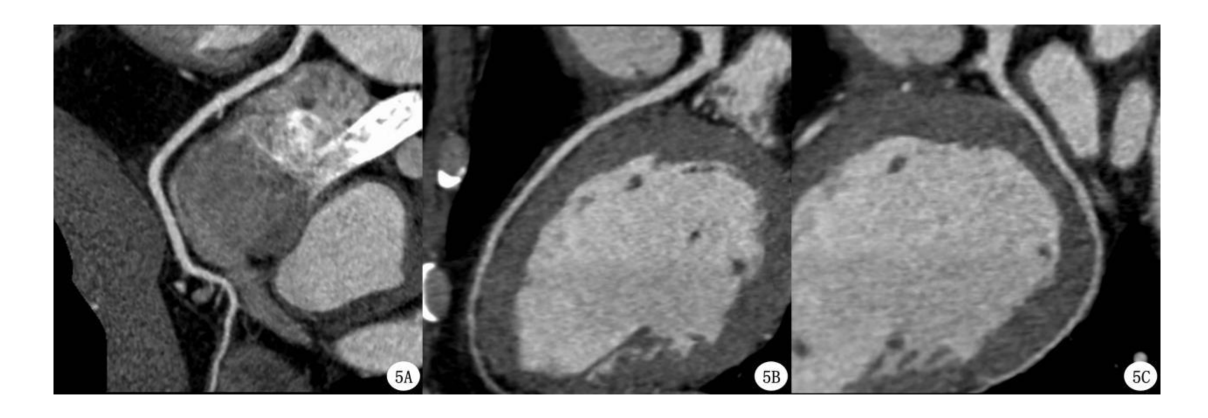


图 5A-C 脉 CTA 示冠状动脉未见明显粥样硬化。

Fig 5A-C CCTA reveals no significant atherosclerosis in the or onary arteries.

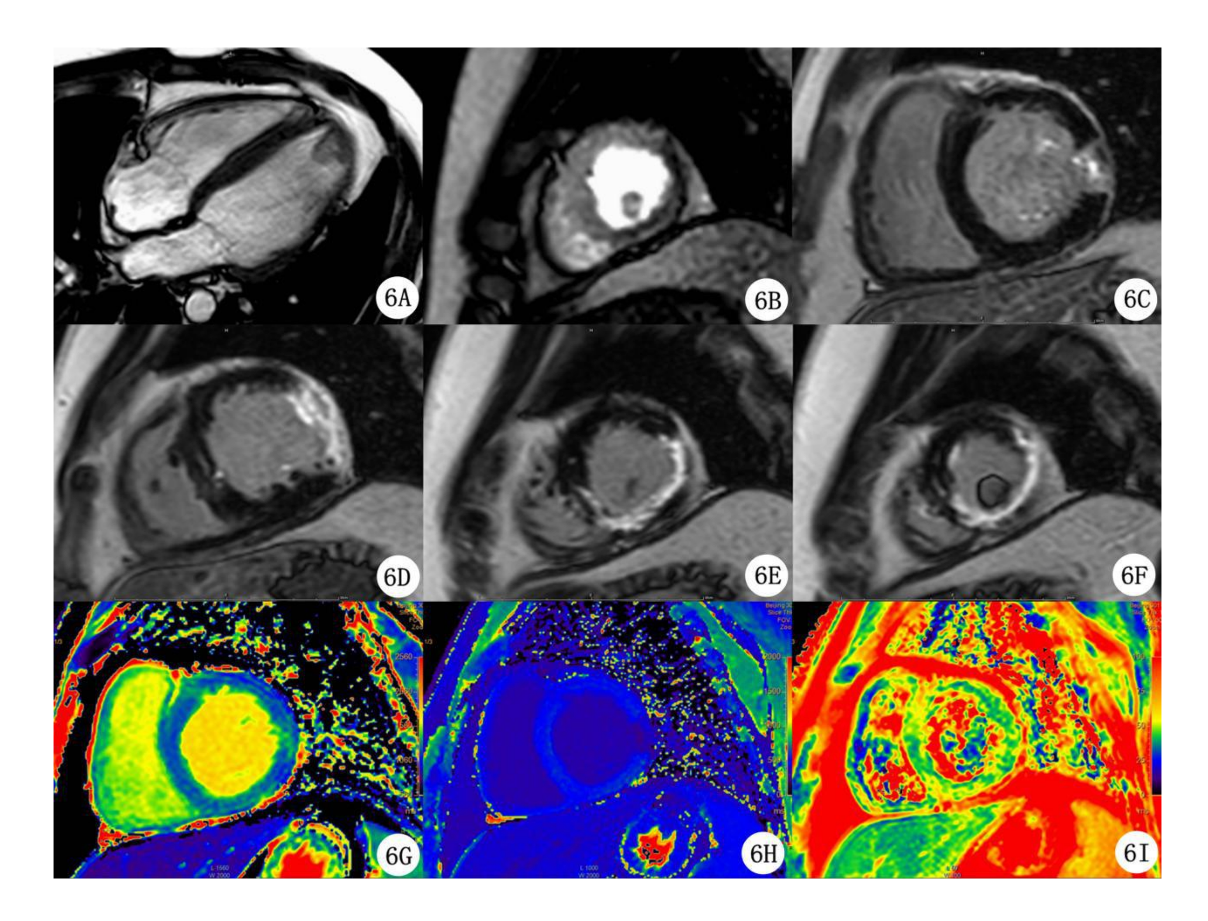


图 6 心脏磁共振平扫+动态增强：图 6A 为电影序列示左室侧壁及心尖部心肌变薄，心尖部见异常信号（血栓）；图 6B 为早期动态灌注示左室侧壁及心尖部心内膜心下灌注减低；图 6C~F LGE 示左室侧壁及心尖部心内膜下至心外膜透壁性延迟强化；图 6G-I 为平扫 T1 mapping、增强 T1 mapping 及 T2 mapping；测得初始 T1 值为 1347.19ms，增强后 T1 值为 315.58ms，平扫 T1 血池 1759.42ms，增强 T1 血池 337.92ms，HCT 0.464，计算 ECV 值约 54%；T2 值为 22.1/s；左室射血分数 LVEF 为 34%。

Fig 6 Cardiac Magnetic Resonance Scanning + Dynamic Enhancement:Fig 6A cine sequence：reveals Myocardial thinning of the left ventricular lateral wall and apical region, abnormal signal seen in the apical region (thrombus);Fig 6B Early dynamic perfusion reveals decreased subepicardial perfusion in the left

ventricular lateral wall and apical endocardium;Fig 6C-F LGE reveals subendocardial to epicardial transmural delayed enhancement in the left ventricular lateral wall and apical area;Fig6G-I Native T1 mapping、enhanced T1 mapping and T2 mapping.T1 myocardium native 1347.19ms,T1 myocardium enhanced 315.58ms，T1 blood native 1759.42ms，T1 blood enhanced 337.92ms,HCT 0.464，ECV 54%；T2 22.14/s；LVEF34%.

2、讨论：

银屑病是一种慢性炎症性皮肤病，其发病机制主要通过以 T 淋巴细胞介导为主、多种免疫细胞共同参与的免疫反应[3][4]。银屑病与多种合并症有关，包括心血管疾病、糖尿病、肥胖、非酒精性脂肪性肝病、银屑病关节炎、炎症性肠病、肾脏疾病、感染、抑郁和癌症等[5][6]。重度银屑病系统性炎症诱导胰岛素抵抗，引发血管内皮功能障碍，促进动脉粥样硬化形成，持续的炎症最终可导致心肌梗死和卒中的发生，是银屑病患者其死亡率较高的主要原因[7]。本文两例患者均合并心血管疾病，且表现为不同形式的心脏损伤。病例 1 患者以扩张性心肌病为主要表现，其主要病理改变为心肌细胞的广泛坏死及纤维化。病例 2 患者则表现为心肌缺血性梗死，其主要病理改变为因血管管腔狭窄或微血管阻塞所致心肌细胞缺血性坏死，而该患者冠脉 CTA 提示正常，考虑梗死原因可能与微循环阻塞有关。目前心脏磁共振检查是评价心肌损伤的主要影像学检查。

心脏磁共振检查（cardiac magnetic resonance，CMR）可一站式评价

心脏形态、结构、功能及组织学特征。通过电影序列可准确量化双心室大小和收缩功能[8]，灌注序列可反映心肌缺血，钆对比剂延迟增强（late gadolinium enhancement,LGE）可反应局部心肌纤维化。本文病例 1 电影序列见左心室体积增大，左室壁变薄，收缩-舒张运动功能减低，延迟增强后见室间隔及下壁心肌中层延迟强化，提示扩张性心肌病并伴有心功能损伤及心肌纤维化。病例 2 电影序列见左室侧壁及心尖部心肌变薄，收缩-舒张运动功能减低，早期动态增强见左室侧壁及心尖部心内膜心下灌注缺损，延迟增强后见左室侧壁及心尖部心内膜心下延迟强化，提示心肌缺血梗死并伴有纤维化。随着近年来心脏磁共振技术的发展，mapping 技术成为评估弥漫性心肌病的一种非侵入性方法，通过心肌参数 T1、T2 值和细胞外容积分数（extracellular volume fraction，ECV）的变化，可量化与心肌病理生理变化相关的磁化特性的改变[9][10]，如定量评估心肌间质弥漫性心肌纤维化、心肌细胞炎症及水肿[11]。研究表明，脂肪浸润及铁过载等疾病增强前 T1 值减低，而纤维化、水肿及淀粉样变增强前 T1 值增高[12]。本文两例患者心肌病变区初始 T1 值延长及 ECV 值升高，均提示心肌纤维化。研究表明，心肌炎症及水肿 T2 值增加，而心肌铁过载 T2 值减低[13]。而病例 2 患者心肌病变区 T2 mapping 值未见明显升高，符合慢性期缺血心肌水肿消退，故考虑为陈旧性心肌梗死。

心源性脑梗死是由于心源性栓子导致颅内血管腔急性闭塞，引起相应供血区脑组织缺血坏死及脑功能障碍，是发病最急，预后最差的脑卒中。研究表明，银屑病可能作为卒中的独立危险因素，而糖尿病、肥胖、血脂异常等代谢综合征也是心血管危险因素[14]。病例 1 患者急性起病，

发病后迅速达峰，梗死灶为大脑右侧 Broca 区新发梗死灶，具有扩张性心肌病、高脂血症、糖尿病前期等心血管危险因素，均符合心源性栓塞特点。

银屑病关节炎(Psoriatic arthritis, PsA)是一种一种慢性的、免疫介导的、炎症性的关节病，银屑病患者中发生率约 30%[15][16]。银屑病关节炎常侵犯单侧关节，不呈对称性。病例 1 患者为银屑病合并银屑病关节炎，以髋关节、腕关节、踝关节及跖趾关节为主，部分以单侧为主，髋关节磁共振表现为关节骨质增生，滑膜增厚及滑囊积液等。银屑病关节炎可引起关节肿胀及功能障碍，晚期可致残[17]。因此银屑病关节炎早期诊断及治疗对改善患者生活质量，防止残疾至关重要[18]。

综上所述，对于具有较长银屑病病史的年轻患者，临床医生通过完善心血管风险相关的实验室及影像学检查，及时发现银屑病合并症的早期迹象，尽早干预及联合治疗相关并发症，从而达到改善患者预后及降低合并症死亡率的目的。

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